MOTOROLA

May 25, 1994

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

RE: Gen. Dkt. No. 90-314
Ex Parte Presentation

Dear Mr. Caton:

During a recent meeting between representatives of Motorola Inc. and Chairman Hundt, we discussed in general terms the Commission's PCS band plan and how it could be refined so as to facilitate the implemention of both terrestrial and satellite PCS in a manner that is cost-effective and responsive to the needs of U.S. businesses and consumers. Since that meeting, Motorola has continued discussions with other industry representatives and Commission staff.[1] We are now ready to recommend a particular band plan which, we believe, would meet those public interest objectives and would be acceptable to the full range of licensed and unlicensed PCS interests and to the satellite community. Motorola respectfully offers that band plan, a copy of which is attached, for the Commission's consideration.

Under this plan, licensed terrestrial PCS would still be allocated 120 MHz of spectrum, but all of these frequencies would fall in the lower part of the emerging technology bands (i.e., 1.8-1.9 GHz). Specifically, the

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[1] Attached hereto, in accordance with the Commission's ex parte rules, is a list of those meetings with Commission staff persons which have occurred during the past week. Disclosure of prior meetings on this subject has previously been filed with the Secretary's Office.

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60 megahertz from 1850 to 1910 MHz would be paired with the 60 megahertz from 1930 to 1990 MHz. The Commission would, therefore, have the flexibility to award three 30 MHz and three 10 MHz PCS licenses per market and potential bidders would still have the opportunity to aggregate such licenses within the limits of the rules. Significantly, by having all licensed PCS stations at 1.8-1.9 GHz, consumers will benefit from lower equipment prices because dual band subscriber units would raise the cost of such equipment by approximately 25 percent. It would also retain the 80 megahertz pairing, and thereby result in the more efficient clearing of microwave stations in these bands.

As for unlicensed PCS, we believe that continued study over the past two years has borne out the wisdom of the Commission's original proposal in this proceeding, which was to allocate the 1910-1930 MHz band to these services. See 7 FCC Rcd 5676, 5693 (1992). We would refine that original proposal only by recommending that the band be divided on an equitable basis between voice and data services (i.e., 1910-1920 MHz for voice and 1920-1930 MHz for data), and that the voice segment be divided into 1.25 MHz channels. Indeed, the Commission's original proposal contemplated the need for 1.25 MHz channels and we strongly believe that such a channelization scheme will maximize access to the band by unlicensed devices.

In addition to this 20 megahertz, another 10 megahertz could be held in reserve for unlicensed PCS in the 2145-2150 MHz and 2160-2165 MHz bands depending on how MSS spectrum needs are accommodated, as explained below. We also recommend that the Commission initiate a new proceeding to identify additional spectrum allocations for unlicensed PCS. Motorola believes that this plan would provide a sufficient amount of spectrum for unlicensed PCS services as they initially enter the market and that, overall, the industry would fare better under this plan because, in addition to retaining the so-called "sweet spot" spectrum (i.e., 1910-1930 MHz), the industry would be faced with clearing fewer microwave incumbents over the full range of spectrum to which it may ultimately have access.

As the foregoing indicates, some of the spectrum that was allocated to the Mobile Satellite Service at WARC-92 could be allocated to terrestrial PCS in the U.S. (i.e., the Region 2 uplink allocation at 1970-1980, the global uplink allocation at 1980-1990 MHz, and the Region 2 downlink allocation at 2160-2165 MHz). Thus, as explained more fully below, regardless of which PCS band plan is ultimately adopted on reconsideration, we strongly urge the Commission to initiate a new proceeding to identify additional spectrum for MSS.

With the spectrum that would remain available to MSS in the emerging technology bands, one possibility would be to pair the 20 MHz of global uplink spectrum at 1990-2010 MHz with the 20 MHz of global downlink spectrum at 2180-2200 MHz. This 40 megahertz, however, would fall short of the spectrum requirements that have been identified by the MSS industry. To address this concern, we have built into the proposed plan the flexibility to allocate, over time, 35 MHz of global MSS spectrum in each direction. Indeed, the availability of this amount of spectrum would be only an uplink issue because at least 35 megahertz of downlink spectrum at 2165-2200 MHz would already be available. This includes 5 megahertz of Region 2 spectrum at 2165-2170 MHz that we would recommend be reallocated for global use at a future World Radiocommunication Conference.

Since the uplink spectrum would have to come mostly from spectrum that is outside the scope of the emerging technology bands, the Commission should, as suggested above, initiate a separate proceeding to identify additional MSS spectrum to pair with the downlink spectrum at 2.1 GHz. One option would be to allocate the 1990-2025 MHz band to MSS. This could be accomplished by shifting the two lower Broadcast Auxiliary Service channels in that band to the 2110-2145 MHz band adjacent to the upper portion of the Broadcast Auxiliary allocation. If the Commission were to determine that moving Broadcast Auxiliary links was, in fact, necessary, then the principle established in the Emerging Technology proceeding of holding harmless the incumbents would, of course, apply. In any event, the amount of spectrum available to broadcasters would not be reduced under this plan and should be sufficient to meet their long term

needs as they migrate to digital equipment. Indeed, since U.S. MSS systems will not need immediate access to this spectrum, the broadcast incumbents of this band can shift to the higher reserve frequencies over a reasonable transition period corresponding to their implementation of digital equipment.

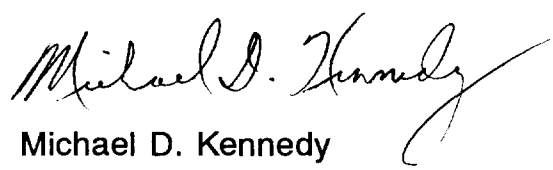
Although this alternative would require that the 2010-2025 MHz band be allocated globally to MSS at a future WRC, Motorola is optimistic that the U.S. can accomplish this because it is our understanding that many members of the international community at WARC-92 had, in fact, proposed that the 1990-2025 MHz band be allocated for MSS uplinks in accordance with the proposed FPLMTS band plan. Another potential option for the uplink is the 1675-1700 MHz band which is allocated to MSS on a co-primary basis with the Meteorological-Satellite and Meteorological Aids Services in Region 2. Again, should this band be considered, we would recommend that it be reallocated on a global basis at a future WRC. Motorola has previously demonstrated that MSS uplinks are compatible with these services. Moreover, it is our understanding that significant progress has been made on this issue in recent WRC-95 preparatory meetings. A third option would be to explore the suitability of using some of the federal government spectrum which NTIA will reallocate for commerical use. In any event, these are only three potential options for MSS uplinks. There may well be others that could be explored in the follow-on proceeding that we are suggesting.

Finally, Motorola wishes to emphasize once again the importance of standards in ensuring initially a smooth roll-out of PCS systems and ultimately the development of high volume, lower cost equipment with clear benefits for the consumer. Furthermore, FCC endorsement of PCS standards will aid U.S. manufacturers in marketing equipment internationally. In this connection, the Commission should strongly encourage industry standards bodies to adopt equipment standards on a timely basis and should require that PCS equipment manufacturers comply with standards developed by an ANSI-accredited body as a condition of type-acceptance. As Motorola and others have previously explained, in the

absence of such standards, there could be numerous negative implications for the development of the U.S. PCS industry, including: a lack of interoperability, even within the same basic technology; the potential for many proprietary and poorly documented systems; limitations on roaming and user choice of operators; the potential abandonment of users; low-volume, high-cost manufacturing; a diffusion of U.S. impact in the global wireless market; more complex PCS/microwave co-existence; and operator and manufacturer confusion. All of these could effectively stifle the introduction and growth of PCS services.

In closing, while the band plan that Motorola is proposing requires that some compromises be made on all sides of this issue, we strongly believe that, on balance, this plan is fair to all concerned and will maximize the opportunity for the Commission's PCS vision to be realized and for the PCS industry that develops to thrive.

Sincerely,



Michael D. Kennedy
Vice President and
Director, Regulatory Relations

Attachments:

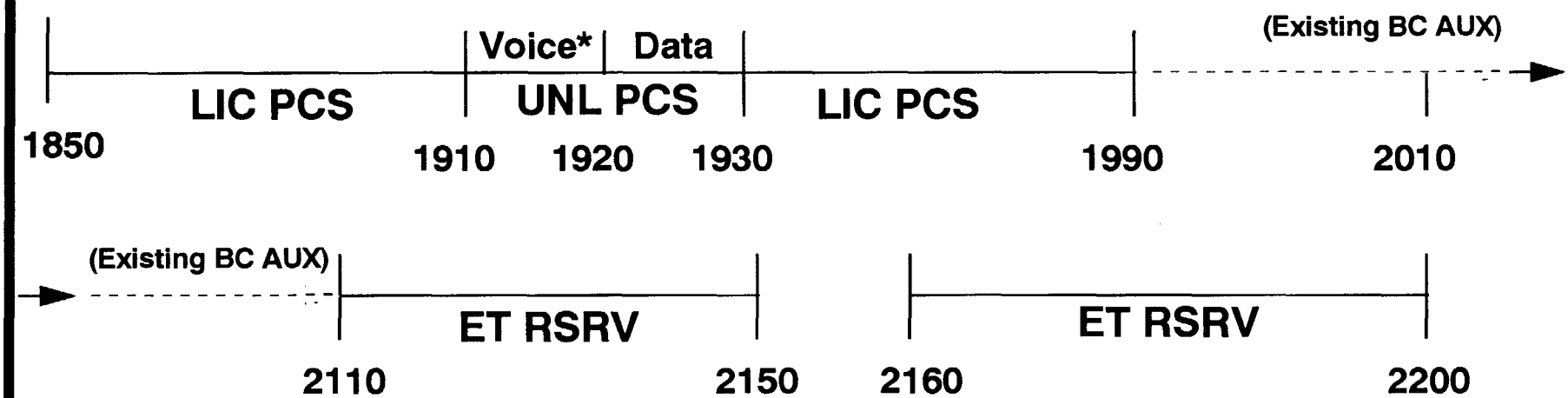
List of Ex Parte Meetings
Recommended PCS Band Plan
Certificate of Service

LIST OF EX PARTE PRESENTATIONS BY REPRESENTATIVES OF MOTOROLA ON ALTERNATIVE PCS BAND PLAN

Date	Name of FCC Official
May 19, 1994	R. Pepper, R. Haller, D. Gips, G. Rosston
May 20, 1994	D. Gips
May 23, 1994	D. Gips, R. Haller, T. Tycz
May 24, 1994	D. Gips
May 25, 1994	B. Levin, R. Pepper, D. Gips, J. Chorney

MOTOROLA

RECOMMENDED PCS BANDPLAN



LIC PCS	120 MHz ALL AT 1.8 GHz
UNLIC PCS	20 MHz ALL AT 1.8 GHz (10 MHz Data, 10 MHz Voice)
ET RSRV	80 MHz to accommodate future satellite and unlicensed PCS needs and broadcast auxilliary, if necessary.

* Unlicensed voice spectrum channelized at 1.25 MHz spacing.

CERTIFICATE OF SERVICE

I, Alice M. de Séve, hereby certify that the foregoing letter was served by first-class mail, postage prepaid, this 25th day of May 1994, on the following persons:

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* Commissioner Andrew C. Barrett
Federal Communications Commission
Room 826
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* Commissioner Rachelle B. Chong
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* Commissioner Susan Ness
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* Delivery by hand.